09/694,241

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	(amino$1dextran or amino adj dextran or aminodextran) same trimid	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/08 14:55
L2	902	(amino$1dextran or amino adj dextran or aminodextran)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/08 14:55
L3	49	l2 and (trimid or trifluoromethyl)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/08 14:56
L4	4	l2 and (trimid or diazirine)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/08 14:58
L5	2	dextran same (trimid or diazirine)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/08 15:00
L6	75	dextran and (trimid or diazirine)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/08 15:02

09/694,241

```
chain nodes :
10  11  12  13
ring nodes :
1  2  3  4  5  6  7  8  9
chain bonds :
1-11  5-7  7-10  11-12  12-13
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  7-8  7-9  8-9
exact/norm bonds :
1-11  7-8  7-9  8-9  11-12  12-13
exact bonds :
5-7  7-10
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6
isolated ring systems :
containing 1 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:CLASS
11:CLASS  12:CLASS  13:CLASS



L1      STRUCTURE UPLOADED

=> s l1
SAMPLE SEARCH INITIATED 09:19:50 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      1 TO ITERATE

100.0% PROCESSED       1 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:            1 TO       80
PROJECTED ANSWERS:               0 TO        0

L2            0 SEA SSS SAM L1

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L1 HAS NO ANSWERS
L1              STR
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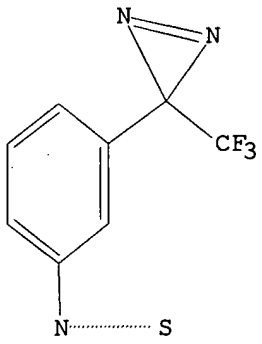


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Structure attributes must be viewed using STN Express query preparation.


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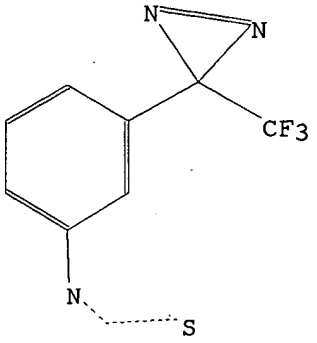
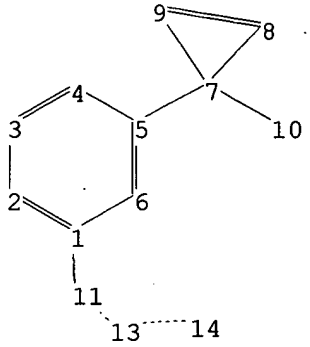
Uploading C:\Program Files\Stnexp\Queries\09694241a.str



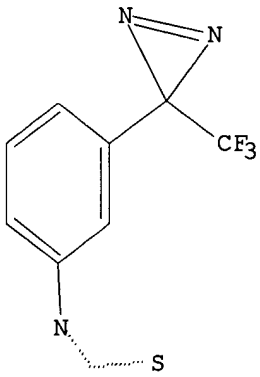


chain nodes :
10 11 13 14
ring nodes :
1 2 3 4 5 6 7 8 9
chain bonds :
1-11 5-7 7-10 11-13 13-14
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-9 8-9
exact/norm bonds :
1-11 7-8 7-9 8-9 11-13 13-14
exact bonds :
5-7 7-10
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS
11:CLASS 13:CLASS 14:CLASS

L3 STRUCTURE UPLOADED

=> d l3
L3 HAS NO ANSWERS
L3 STR



Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED -      1 TO ITERATE

100.0% PROCESSED       1 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:            1 TO       80
PROJECTED ANSWERS:               0 TO        0

L4            0 SEA SSS SAM L3

=> s l3 sss full
FULL SEARCH INITIATED 09:22:47 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     25 TO ITERATE

100.0% PROCESSED      25 ITERATIONS                                4 ANSWERS
SEARCH TIME: 00.00.01

L5            4 SEA SSS FUL L3

=> FIL CAPLUS
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   163.48     163.69

FILE 'CAPLUS' ENTERED AT 09:22:57 ON 30 JUN 2005
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FILE COVERS 1907 - 30 Jun 2005  VOL 143 ISS 1
FILE LAST UPDATED: 29 Jun 2005  (20050629/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

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L6           22 L5

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            71 BSAS
         14286 BSA
                 (BSA OR BSAS)
         33327 DEXTRAN
          4084 DEXTRANS
         34127 DEXTRAN
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```
              (DEXTRAN OR DEXTRANS)
       1029205 AMINO
            42 AMINOS
       1029222 AMINO
              (AMINO OR AMINOS)
         33327 DEXTRAN
          4084 DEXTRANS
         34127 DEXTRAN
              (DEXTRAN OR DEXTRANS)
            34 AMINO-DEXTRAN
              (AMINO(W)DEXTRAN)
           144 AMINODEXTRAN
            10 AMINODEXTRANS
           146 AMINODEXTRAN
              (AMINODEXTRAN OR AMINODEXTRANS)
        770129 T
         14249 BSA
            71 BSAS
         14286 BSA
              (BSA OR BSAS)
            24 T-BSA
              (T(W)BSA)
L7           5 L6 AND (BSA OR DEXTRAN OR AMINO-DEXTRAN OR AMINODEXTRAN OR T-BSA
               )

=> d l7 ibib abs hitstr tot

L7   ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2005:493757  CAPLUS
TITLE:                    Photolinker macromolecules, metallic substrates,
                          ligands modified with the linkers, and process of
                          preparation
INVENTOR(S):              Sigrist, Hans; Chai Gao, Hui; Soury-Lavergne, Isabelle
PATENT ASSIGNEE(S):       C.S.E.M. Centre Suisse d'Electronique et de
                          Microtechnique, Switz.
SOURCE:                   PCT Int. Appl., 28 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

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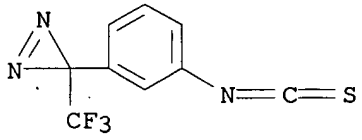
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
             SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
PRIORITY APPLN. INFO.:                        EP 2003-405851      A  20031128
AB   The invention relates to a photolinker macromol. comprising photoactivable
     groups and sulfur-containing groups, which is attached to a metallic
     substrate, and optionally covalently bonded to a ligand, and the use
     thereof in biosensor systems, microarrays, nanoparticles, nanoassemblies
     and microparticles useful in bioanalytics, or the pharmaceutical, or
     textile industry.  Thus OptoDex S was synthesized starting from
```

aminodextran and 3-(trifluoromethyl)-3-(m-isothiocyanophenyl)diazirine; the obtained OptoDex A was treated on a chromatog. column with sulfosuccinimidyl-6-[3'-(2-pyrimidylditihio)propionamido] hexanoate (LC sulfo SPDP). OptoDex S was chemisorbed onto gold surfaces; fluorophor (Cy5)-labeled riboflavin binding protein, Cy3-labeled BSU and non-labeled mouse Ig were photoimmobilized to the OptoDex S-gold surface. Vitamin B2 was determined by surface plasmon resonance using the photoimmobilized riboflavin binding protein surface.

IT **130973-94-3**, 3-(Trifluoromethyl)-3-(m-isothiocyanophenyl)diazirine
RL: DEV (Device component use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(photolinker macromols., metallic substrates, ligands modified with the linkers, and process of preparation)

RN 130973-94-3 CAPLUS

CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:182876 CAPLUS
DOCUMENT NUMBER: 142:263005
TITLE: Methods of chemical and biochememical functionalization of yarn and textile products
INVENTOR(S): Sigrist, Hans; Crevoisier, Francois; Chai, Gao Hui
PATENT ASSIGNEE(S): Csem Centre Suisse D'electronique Et De Microtechnique Sa, Switz.
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005019518	A1	20050303	WO 2004-IB2962	20040826

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2003-19929 A 20030826

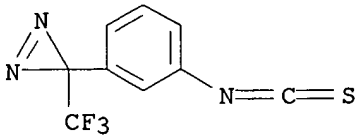
AB Methods of chemical and biochem. functionalization of yarn and textile products are described. A yarn or textile product is contacted with a linker mol. comprising two or more photochem. activatable chemical groups and a non-linker mol. having a desired property. Photochem. activation of the

chemical groups causes covalent attachment of the non-linker mol. to the yarn or textile product by means of the linker mol. in a single step. The methods are particularly useful for immobilization to yarn or textile of biomols. that are susceptible to denaturation. Use of linker mols. derived from proteins or polysaccharides further minimizes denaturation of the biomol.

IT **130973-94-3DP**, 3-(Trifluoromethyl)-3-(m-isothiocyanophenyl) diazirine, reaction products with thicarbamoylated **aminodextran**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photolinker; chemical and biochememical functionalization of yarn and textile products)

RN 130973-94-3 CAPLUS

CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:156059 CAPLUS

DOCUMENT NUMBER: 136:321611

TITLE: Protein density gradients on surfaces

AUTHOR(S): Caelen, Isabelle; Gao, Hui; Sigrist, Hans

CORPORATE SOURCE: Centre Suisse d'Electronique et de Microtechnique SA (CSEM), Neuchatel, CH-2007, Switz.

SOURCE: Langmuir (2002), 18(7), 2463-2467
CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

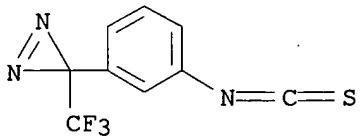
LANGUAGE: English

AB Gradients of biol. active proteins can be obtained by applying photochem. reactions. A photosensitive polysaccharide-based polymer (OptoDex) is used to covalently immobilize proteins on surfaces. Gradients of proteins are generated by varying the dose of light during the photoimmobilization. Probe proteins conserve their catalytic activity or immunol. binding characteristics when linked to surfaces exemplified by silicon nitride or polystyrene. Heterogeneous immunoreactions between photoimmobilized antigens and antibodies showed an optimum binding efficiency at an antigen d. of approx. 1.3 ng/mm2.

IT **130973-94-3D**, reaction products with **aminodextrans**
RL: NUU (Other use, unclassified); USES (Uses)
(protein d. gradients on surfaces)

RN 130973-94-3 CAPLUS

CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:708998 CAPLUS
DOCUMENT NUMBER: 131:308586
TITLE: Preparation of biosensors using photolinker-conjugates for immobilization of intermediate **dextran** layers to the polymer coated surfaces
INVENTOR(S): Barie, Nicole; Gobet, Jean; Rapp, Michael; Sigrist, Hans
PATENT ASSIGNEE(S): Forschungszentrum Karlsruhe G.m.b.H., Germany; Centre Suisse D'electronique Et De Microtechnique S.A.
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

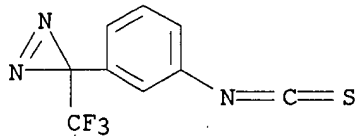
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9956119	A1	19991104	WO 1999-EP2599	19990419
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19818360	A1	19991104	DE 1998-19818360	19980424
DE 19818360	C2	20000531		
EP 1073895	A1	20010207	EP 1999-920697	19990419
R: AT, CH, DE, DK, FR, GB, IT, LI, SE				
JP 2002513153	T2	20020508	JP 2000-546229	19990419
PRIORITY APPLN. INFO.:			DE 1998-19818360 A	19980424
			WO 1999-EP2599 W	19990419

Priority Claim

AB The invention concerns the preparation of mass sensitive sensors by immobilizing the intermediate **dextran** layers to the polymer coated surfaces via the photolinker TRIMID that is conjugated to bovine serum albumin or **aminodextran**. The polymer coating is polyimide or poly-p-xylylene. Sensors prepared by the method are surface acoustic wave sensors, optical and electrochem. sensors. Thus a mixture of TRIMID-**BSA** conjugate and **dextran** was applied to a polyimide coated support; after incubation at room temperature and drying in vacuum, the photopolymn. was performed with a mercury lamp. The **dextran** intermediate layer was than used for the immobilization of antibodies using the EDC and N-hydroxysuccinimide.

IT **130973-94-3**, TRIMID
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(preparation of biosensors using photolinker-conjugates for immobilization of intermediate **dextran** layers to polymer coated surfaces)

RN 130973-94-3 CAPLUS
CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



IT **130973-94-3DP**, TRIMID, conjugate with serum albumin or **aminodextran**

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(preparation of biosensors using photolinker-conjugates for immobilization of intermediate **dextran** layers to polymer coated surfaces)

RN 130973-94-3 CAPLUS

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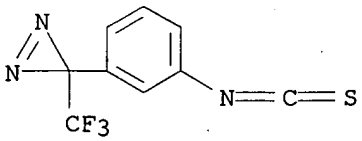


REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:653196 CAPLUS

DOCUMENT NUMBER: 121:253196

TITLE: Photolinker-polymer-mediated immobilization of monoclonal antibodies, F(ab')2 and F(ab') fragments

AUTHOR(S): Gao, Hui; Kislig, Elisabeth; Oranth, Norbert; Sigrist, Hans

CORPORATE SOURCE: Inst. Biochem., Univ. Bern, Bern, CH-3012, Switz.

SOURCE: Biotechnology and Applied Biochemistry (1994), 20, 251-63
CODEN: BABIEC; ISSN: 0885-4513

DOCUMENT TYPE: Journal

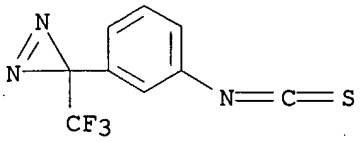
LANGUAGE: English

AB Photolinker-polymer-mediated covalent immobilization of antibodies, F(ab') and F(ab')2 fragments has been achieved by light-dependent coupling procedures. Anti-α-fetoprotein (anti-AFP) monoclonal antibodies were covalently linked to microplates by layer-coating procedures, which entail antibody photoimmobilization to a photolinker-polymer-precoated surface. In this and the co-coating procedure described, diazirine-functionalized **BSA** (**T-BSA**) served as the multifunctional light-activatable linking agent (photolinker polymer). Prior to photoactivation, F(ab')2 or F(ab') fragments derived from anti-(prostate-specific antigen) monoclonal antibodies were mixed and co-coated with the photolinker polymer on to polystyrene microplates. The immunoreagents remained immunol. active after 350 nm irradiation (irradiance 0.7 m@.cntdot.cm-2 for 20 min). Immunoresponses of photoimmobilized monoclonal anti-AFP antibodies were equivalent to signal intensities obtained with phys. adsorbed antibodies. Photoimmobilization of anti-PSA F(ab') fragments in the presence of **T-BSA** revealed exponential binding characteristics indicating stabilizing mol. cooperativity of the **BSA** constituent. Co-coating procedures yielded 62 and 65% binding of applied 14C-labeled F(ab')2 and F(ab') fragments resp. Covalency of antibody binding was inferred from: (i) the strict dependence of photoreagent availability; (ii) the light-dependence of the immobilization process; and (iii) the reversibility of immunocomplexation after acid treatment.

IT **130973-94-3**
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(Photolinker polymer trifluoromethylisothiocyanophenyldiazirine-mediated immobilization of monoclonal antibodies or fragments)

RN 130973-94-3 CAPLUS

CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



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        136895 CARBOHYDRATES
        199343 CARBOHYDRATE
                 (CARBOHYDRATE OR CARBOHYDRATES)
         54918 POLYSACCHARIDE
         68149 POLYSACCHARIDES
         86301 POLYSACCHARIDE
                 (POLYSACCHARIDE OR POLYSACCHARIDES)
L8           5 L6 AND (CARBOHYDRATE OR POLYSACCHARIDE)

=> dup rem l7 l8
PROCESSING COMPLETED FOR L7
PROCESSING COMPLETED FOR L8
L9           8 DUP REM L7 L8 (2 DUPLICATES REMOVED)
               ANSWERS '1-8' FROM FILE CAPLUS

=> d l9 ibib abs hitstr tot

L9   ANSWER 1 OF 8  CAPLUS  COPYRIGHT 2005 ACS on STN  DUPLICATE 1
ACCESSION NUMBER:         2005:182876  CAPLUS
DOCUMENT NUMBER:          142:263005
TITLE:                    Methods of chemical and biochememical
                          functionalization of yarn and textile products
INVENTOR(S):              Sigrist, Hans; Crevoisier, Francois; Chai, Gao Hui
PATENT ASSIGNEE(S):       Csem Centre Suisse D'electronique Et De Microtechnique
                          Sa, Switz.
SOURCE:                   PCT Int. Appl., 41 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 2005019518         A1    20050303    WO 2004-IB2962          20040826
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
PRIORITY APPLN. INFO.:                       GB 2003-19929       A  20030826
AB   Methods of chemical and biochem. functionalization of yarn and textile
     products are described.  A yarn or textile product is contacted with a
     linker mol. comprising two or more photochem. activatable chemical groups and
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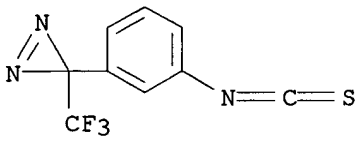
a non-linker mol. having a desired property. Photochem. activation of the chemical groups causes covalent attachment of the non-linker mol. to the yarn or textile product by means of the linker mol. in a single step. The methods are particularly useful for immobilization to yarn or textile of biomols. that are susceptible to denaturation. Use of linker mols. derived from proteins or polysaccharides further minimizes denaturation of the biomol.

IT **130973-94-3DP**, 3-(Trifluoromethyl)-3-(m-isothiocyanophenyl) diazirine, reaction products with thicarbamoylated **aminodextran**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photolinker; chemical and biochememical functionalization of yarn and textile products)

RN 130973-94-3 CAPLUS

CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2

ACCESSION NUMBER: 2002:156059 CAPLUS

DOCUMENT NUMBER: 136:321611

TITLE: Protein density gradients on surfaces

AUTHOR(S): Caelen, Isabelle; Gao, Hui; Sigrist, Hans

CORPORATE SOURCE: Centre Suisse d'Electronique et de Microtechnique SA (CSEM), Neuchatel, CH-2007, Switz.

SOURCE: Langmuir (2002), 18(7), 2463-2467
CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

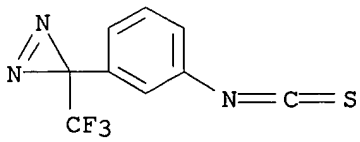
LANGUAGE: English

AB Gradients of biol. active proteins can be obtained by applying photochem. reactions. A photosensitive polysaccharide-based polymer (OptoDex) is used to covalently immobilize proteins on surfaces. Gradients of proteins are generated by varying the dose of light during the photoimmobilization. Probe proteins conserve their catalytic activity or immunol. binding characteristics when linked to surfaces exemplified by silicon nitride or polystyrene. Heterogeneous immunoreactions between photoimmobilized antigens and antibodies showed an optimum binding efficiency at an antigen d. of approx. 1.3 ng/mm2.

IT **130973-94-3D**, reaction products with **aminodextrans**
RL: NUU (Other use, unclassified); USES (Uses)
(protein d. gradients on surfaces)

RN 130973-94-3 CAPLUS

CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:493757 CAPLUS
TITLE: Photolinker macromolecules, metallic substrates, ligands modified with the linkers, and process of preparation
INVENTOR(S): Sigrist, Hans; Chai Gao, Hui; Soury-Lavergne, Isabelle
PATENT ASSIGNEE(S): C.S.E.M. Centre Suisse d'Electronique et de Microtechnique, Switz.
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005052580	A1	20050609	WO 2004-CH704	20041123

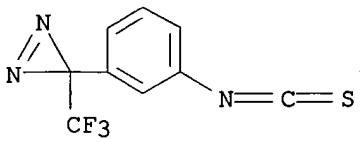
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: EP 2003-405851 A 20031128

AB The invention relates to a photolinker macromol. comprising photoactivable groups and sulfur-containing groups, which is attached to a metallic substrate, and optionally covalently bonded to a ligand, and the use thereof in biosensor systems, microarrays, nanoparticles, nanoassemblies and microparticles useful in bioanalytics, or the pharmaceutical, or textile industry. Thus OptoDex S was synthesized starting from **aminodextran** and 3-(trifluoromethyl)-3-(m-isothiocyanophenyl)diazirine; the obtained OptoDex A was treated on a chromatog. column with sulfosuccinimidyl-6-[3'-(2-pyrimidylditihio)propionamido] hexanoate (LC sulfo SPDP). OptoDex S was chemisorbed onto gold surfaces; fluorophor (Cy5)-labeled riboflavin binding protein, Cy3-labeled BSU and non-labeled mouse Ig were photoimmobilized to the OptoDex S-gold surface. Vitamin B2 was determined by surface plasmon resonance using the photoimmobilized riboflavin binding protein surface.

IT **130973-94-3**, 3-(Trifluoromethyl)-3-(m-isothiocyanophenyl)diazirine
RL: DEV (Device component use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(photolinker macromols., metallic substrates, ligands modified with the linkers, and process of preparation)

RN 130973-94-3 CAPLUS
CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

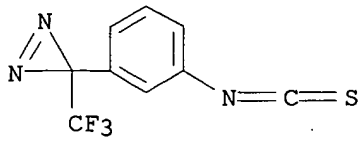
L9 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:708998 CAPLUS
DOCUMENT NUMBER: 131:308586
TITLE: Preparation of biosensors using photolinker-conjugates for immobilization of intermediate **dextran** layers to the polymer coated surfaces
INVENTOR(S): Barie, Nicole; Gobet, Jean; Rapp, Michael; Sigrist, Hans
PATENT ASSIGNEE(S): Forschungszentrum Karlsruhe G.m.b.H., Germany; Centre Suisse D'electronique Et De Microtechnique S.A.
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9956119	A1	19991104	WO 1999-EP2599		19990419
W: JP, US					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
DE 19818360	A1	19991104	DE 1998-19818360		19980424
DE 19818360	C2	20000531			
EP 1073895	A1	20010207	EP 1999-920697		19990419
R: AT, CH, DE, DK, FR, GB, IT, LI, SE					
JP 2002513153	T2	20020508	JP 2000-546229		19990419
PRIORITY APPLN. INFO.:			DE 1998-19818360	A	19980424
			WO 1999-EP2599	W	19990419

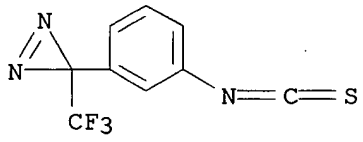
AB The invention concerns the preparation of mass sensitive sensors by immobilizing the intermediate **dextran** layers to the polymer coated surfaces via the photolinker TRIMID that is conjugated to bovine serum albumin or **aminodextran**. The polymer coating is polyimide or poly-p-xylylene. Sensors prepared by the method are surface acoustic wave sensors, optical and electrochem. sensors. Thus a mixture of TRIMID-**BSA** conjugate and **dextran** was applied to a polyimide coated support; after incubation at room temperature and drying in vacuum, the photopolymn. was performed with a mercury lamp. The **dextran** intermediate layer was than used for the immobilization of antibodies using the EDC and N-hydroxysuccinimide.

IT **130973-94-3**, TRIMID
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(preparation of biosensors using photolinker-conjugates for immobilization of intermediate **dextran** layers to polymer coated surfaces)

RN 130973-94-3 CAPLUS
CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



IT **130973-94-3DP**, TRIMID, conjugate with serum albumin or **aminodextran**
RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(preparation of biosensors using photolinker-conjugates for immobilization of intermediate **dextran** layers to polymer coated surfaces)
RN 130973-94-3 CAPLUS
CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:795709 CAPLUS
DOCUMENT NUMBER: 132:40580
TITLE: Method for producing biocompatible surfaces
INVENTOR(S): Herbst, Franz; Kalatchev, Alexei
PATENT ASSIGNEE(S): Germany
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964085	A1	19991216	WO 1998-EP8022	19981209
W: AU, BG, BR, CA, CZ, HU, ID, IL, JP, KR, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, TR, UA, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9918777	A1	19991230	AU 1999-18777	19981209
EP 1087799	A1	20010404	EP 1998-963549	19981209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002517285	T2	20020618	JP 2000-553152	19981209
PRIORITY APPLN. INFO.:			WO 1998-EP3465 W	19980609
			WO 1998-EP8022 W	19981209

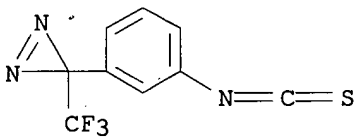
AB Medical objects such as implants and especially stents are endowed with a biocompatible diamondlike coating by use of a low-temperature plasma produced at reduced pressure in a gas or gas mixture containing ≥1 gaseous C compound and optionally a carrier gas by a combination of a radiofrequency source (which emits at a frequency in the MHz range) and an ultrasound source (which emits at a frequency in the kHz range). Plasma polymerization occurs at a

gas pressure of 0.02-1 torr and an energy d. of 1-20 GJ/kg. A biomol., e.g. a natural product such as a glycosaminoglycan, is then covalently bound to the coating via a photoactive spacer layer of PEI; the biomol. first binds to the polyamine through ionic, hydrophobic , or H bonding, and covalent bonding is then effected by irradiation and generation of reactive carbenes. The biomol. preferably has an overall charge opposite to the polyamine; this makes it possible to work with very low concns. of the biomol., owing to a strong ionic concentration effect of the biomol. on the polyamine layer. Thus, stents were placed vertically on a plate electrode in a reactor which was evacuated to <0.001 torr and then filled with Ar to a pressure of 0.04 torr. An Ar/CH4 (95:5) plasma was then generated at 0.04 torr, 13.46 MHz radiofrequency, and 20 kHz ultrasound frequency to produce a diamondlike layer 50 nm thick on the stents. The stents were then incubated in a solution of PEI coupled to photoactive 3-trifluoromethyl-3-(m-isothiocyanophenyl)diazirine, subsequently in a heparin solution, dried, and UV irradiated at 360 nm to bind the heparin covalently to PEI and the PEI to the diamondlike surface layer on the stents.

IT **130973-94-3**, 3-Trifluoromethyl-3-(m-isothiocyanophenyl)diazirine
RL: RCT (Reactant); RACT (Reactant or reagent)
(linker modified with; method for producing biocompatible surfaces)

RN 130973-94-3 CAPLUS

CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:127596 CAPLUS

DOCUMENT NUMBER: 126:128990

TITLE: Device with a biologically active substance covalently immobilized through a bifunctional linking agent on a nitride substrate

INVENTOR(S): Hui, Chai-Gao; Luginbuehl, Reto; Sigrist, Hans; Skinner, Nigel; Van der Vlekkert, Hendrik

PATENT ASSIGNEE(S): C.S.E.M. Centre Suisse D'electronique Et De Microtechnique Sa, Switz.

SOURCE: Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 754947	A1	19970122	EP 1996-401605	19960718
EP 754947	B1	20011010		
R: CH, DE, FR, GB, LI				
FR 2737012	A1	19970124	FR 1995-8737	19950719
FR 2737012	B1	19970912		
US 5858802	A	19990112	US 1996-684458	19960719

PRIORITY APPLN. INFO.: FR 1995-8737 A 19950719

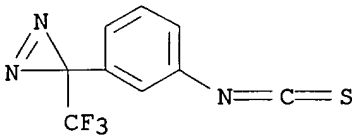
AB The invention concerns a device composed of a substrate (e.g., silicon

nitride) and a biol. active compound (e.g., ligand, antibody, enzyme, receptor, protein, virus, drug, metabolite, etc.) bound to at least a part of the surface of said substrate by the simultaneous or sequential reaction of the substrate with the biol. active compound using a bifunctional crosslinking agent. The crosslinking agent has one functional group, e.g., diazirine, which is a photoactivatable generator of carbenes and binds the crosslinking agent to a mineral substrate, and another functional group that binds the crosslinking agent to the biol. active compound The device may be used as a biosensor, bioreactor, an implant, a device for medical or industrial anal., or a clin. analyzer. Among the examples given are the photoimmobilization of 3-(trifluoromethyl)-3-(m-isothiocyanatophenyl)diazirine (TRIMID)-conjugated bovine serum albumin to silicon nitride, covalent coupling of glucose oxidase to silicon nitride using TRIMID, and immobilization of antibodies on the tips used in a scanning atomic force microscope.

IT **130973-94-3D**, protein conjugates
RL: RCT (Reactant); RACT (Reactant or reagent)
(bioactive compound immobilized on nitride substrate using bifunctional crosslinking agent)

RN 130973-94-3 CAPLUS

CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



L9 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:653196 CAPLUS

DOCUMENT NUMBER: 121:253196

TITLE: Photolinker-polymer-mediated immobilization of monoclonal antibodies, F(ab')2 and F(ab') fragments

AUTHOR(S): Gao, Hui; Kislig, Elisabeth; Oranth, Norbert; Sigrist, Hans

CORPORATE SOURCE: Inst. Biochem., Univ. Bern, Bern, CH-3012, Switz.

SOURCE: Biotechnology and Applied Biochemistry (1994), 20, 251-63
CODEN: BABIEC; ISSN: 0885-4513

DOCUMENT TYPE: Journal

LANGUAGE: English

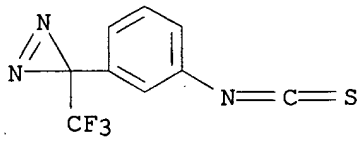
AB Photolinker-polymer-mediated covalent immobilization of antibodies, F(ab') and F(ab')2 fragments has been achieved by light-dependent coupling procedures. Anti-α-fetoprotein (anti-AFP) monoclonal antibodies were covalently linked to microplates by layer-coating procedures, which entail antibody photoimmobilization to a photolinker-polymer-precoated surface. In this and the co-coating procedure described, diazirine-functionalized **BSA** (**T-BSA**) served as the multifunctional light-activatable linking agent (photolinker polymer). Prior to photoactivation, F(ab')2 or F(ab') fragments derived from anti-(prostate-specific antigen) monoclonal antibodies were mixed and co-coated with the photolinker polymer on to polystyrene microplates. The immunoreagents remained immunol. active after 350 nm irradiation (irradiance 0.7 m@.cntdot.cm-2 for 20 min). Immunoresponses of photoimmobilized monoclonal anti-AFP antibodies were equivalent to signal intensities obtained with phys. adsorbed antibodies. Photoimmobilization of anti-PSA F(ab') fragments in the presence of **T-BSA** revealed exponential binding characteristics indicating stabilizing mol.

cooperativity of the **BSA** constituent. Co-coating procedures yielded 62 and 65% binding of applied 14C-labeled F(ab')2 and F(ab') fragments resp. Covalency of antibody binding was inferred from: (i) the strict dependence of photoreagent availability; (ii) the light-dependence of the immobilization process; and (iii) the reversibility of immunocomplexation after acid treatment.

IT **130973-94-3**
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(Photolinker polymer trifluoromethylisothiocyanophenyldiazirine-mediated immobilization of monoclonal antibodies or fragments)

RN 130973-94-3 CAPLUS

CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



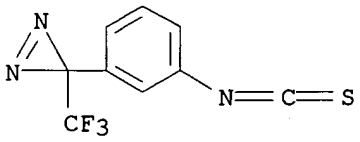
L9 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:102216 CAPLUS
DOCUMENT NUMBER: 116:102216
TITLE: Method for the light-induced immobilization of biomolecules on chemically "inert" surfaces
INVENTOR(S): Sigrist, Hans; Klingler-Dabral, Vibhuti; Dolder, Max; Wegmueller, Bernhard
PATENT ASSIGNEE(S): Switz.
SOURCE: PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9116425	A1	19911031	WO 1991-CH85		19910411
W: JP, US					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE					
EP 484472	A1	19920513	EP 1991-906480		19910411
EP 484472	B1	19970716			
R: AT, BE, CH, DE, DK, FR, GB, IT, LI, NL, SE					
AT 155524	E	19970815	AT 1991-906480		19910411
PRIORITY APPLN. INFO.:			CH 1990-1253	A	19900412
			WO 1991-CH85	W	19910411

AB A method for photochem. or elec. induced immobilization of biomols. (e.g. proteins, nucleic acids, lipids, **carbohydrates**) on inert substrates is described. Substrates such as glass and plastics are pretreated such that they can be derivatized with, e.g. a photoactivatable heterobifunctional crosslinker. The crosslinker contains a photoactive group such as a diazirine or aryl azide. Photoactivation of the derivatized substrate provides a substrate containing carbenes or nitrenes which will covalently crosslink biomols. to the substrate. Glass fiber filters were derivatized with 3-(triethoxysilyl)propylamine then reacted with 3-(trifluoromethyl)-3-(m-isothiocyanophenyl)diazirine to prepare a photoactive substrate on which a peptide was immobilized upon exposure to UV light. The sequence of the immobilized peptide was determined by gas-phase sequencing.

IT **130973-94-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with derivatized glass fiber filter, immobilization of peptide for sequencing in relation to)
RN 130973-94-3 CAPLUS
CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



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1336220 PHOTO?
L10 5 L8 AND PHOTO?

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L10 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:182876 CAPLUS
DOCUMENT NUMBER: 142:263005
TITLE: Methods of chemical and biochememical functionalization of yarn and textile products
INVENTOR(S): Sigrist, Hans; Crevoisier, Francois; Chai, Gao Hui
PATENT ASSIGNEE(S): Csem Centre Suisse D'electronique Et De Microtechnique Sa, Switz.
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005019518	A1	20050303	WO 2004-IB2962	20040826
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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PRIORITY APPLN. INFO.: GB 2003-19929 A 20030826

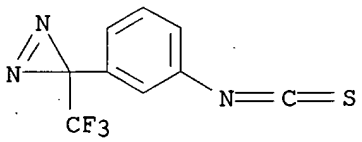
AB Methods of chemical and biochem. functionalization of yarn and textile products are described. A yarn or textile product is contacted with a linker mol. comprising two or more **photochem.** activatable chemical groups and a non-linker mol. having a desired property. **Photochem** . activation of the chemical groups causes covalent attachment of the non-linker mol. to the yarn or textile product by means of the linker mol. in a single step. The methods are particularly useful for immobilization to yarn or textile of biomols. that are susceptible to denaturation. Use of linker mols. derived from proteins or **polysaccharides** further

minimizes denaturation of the biomol.

IT **130973-94-3DP**, 3-(Trifluoromethyl)-3-(m-isothiocyanophenyl) diazirine, reaction products with thicarbamoylated aminodextran
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**photolinker**; chemical and biochememical functionalization of yarn and textile products)

RN 130973-94-3 CAPLUS

CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:156059 CAPLUS

DOCUMENT NUMBER: 136:321611

TITLE: Protein density gradients on surfaces

AUTHOR(S): Caelen, Isabelle; Gao, Hui; Sigrist, Hans

CORPORATE SOURCE: Centre Suisse d'Electronique et de Microtechnique SA (CSEM), Neuchatel, CH-2007, Switz.

SOURCE: Langmuir (2002), 18(7), 2463-2467
CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

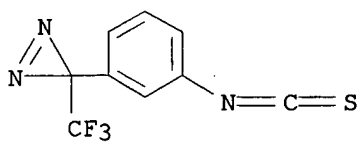
LANGUAGE: English

AB Gradients of biol. active proteins can be obtained by applying **photochem.** reactions. A **photosensitive polysaccharide**-based polymer (OptoDex) is used to covalently immobilize proteins on surfaces. Gradients of proteins are generated by varying the dose of light during the **photoimmobilization**. Probe proteins conserve their catalytic activity or immunol. binding characteristics when linked to surfaces exemplified by silicon nitride or polystyrene. Heterogeneous immunoreactions between **photoimmobilized** antigens and antibodies showed an optimum binding efficiency at an antigen d. of approx. 1.3 ng/mm2.

IT **130973-94-3D**, reaction products with aminodextrans
RL: NUU (Other use, unclassified); USES (Uses)
(protein d. gradients on surfaces)

RN 130973-94-3 CAPLUS

CN 3H-Diazirine, 3-(3-isothiocyanatophenyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN